

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B60G3/20 B60G7/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B60G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
PAJ, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 08, 29 August 1997 (1997-08-29) -& JP 09 095113 A (HONDA MOTOR CO LTD), 8 April 1997 (1997-04-08) abstract; figures 1-4	1-3, 5, 9
Y	---	4, 6-8
Y	EP 0 135 857 A (BAYERISCHE MOTOREN WERKE AG) 3 April 1985 (1985-04-03) abstract; claims 1,2; figure 1 page 4, line 16 -page 5, line 10	4
A	---	2, 3, 6-8
Y	US 6 267 526 B1 (MCLAUGHLIN RONALD J) 31 July 2001 (2001-07-31) figures 5A, 9, 10	6-8
A	---	2, 3, 5, 9
	--- -/--	

☒ Further documents are listed in the continuation of box C.

☐ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

3 September 2004

Date of mailing of the international search report

21/09/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Tsitsilonis, L

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	PATENT ABSTRACTS OF JAPAN vol. 014, no. 517 (M-1047), 13 November 1990 (1990-11-13) & JP 02 216309 A (MAZDA MOTOR CORP), 29 August 1990 (1990-08-29) abstract; figures 1,2	6-8
A	---	1-3,5
Y	US 4 181 189 A (HOBSENSIEFKEN DEAN) 1 January 1980 (1980-01-01) figures 2,3,5	8
A	---	5-7
A	EP 0 262 661 A (MAZDA MOTOR) 6 April 1988 (1988-04-06) abstract; figures 1-5	1-3,5-9
A	---	
A	PATENT ABSTRACTS OF JAPAN vol. 014, no. 305 (M-0992), 29 June 1990 (1990-06-29) & JP 02 099415 A (MAZDA MOTOR CORP), 11 April 1990 (1990-04-11) abstract; figures	1-3,5-7
A	---	
A	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 10, 30 November 1995 (1995-11-30) & JP 07 186649 A (HONDA MOTOR CO LTD), 25 July 1995 (1995-07-25) abstract; figures 3-5	1-3,5-7
A	---	
A	PATENT ABSTRACTS OF JAPAN vol. 007, no. 261 (M-257), 19 November 1983 (1983-11-19) & JP 58 141907 A (NISSAN JIDOSHA KK), 23 August 1983 (1983-08-23) abstract; figures 2-6	1

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 09095113	A	08-04-1997	NONE	
EP 0135857	A	03-04-1985	DE 3333706 A1 EP 0135857 A2 JP 60088615 A US 4589677 A	11-04-1985 03-04-1985 18-05-1985 20-05-1986
US 6267526	B1	31-07-2001	DE 10031454 A1 GB 2351479 A , B JP 2001055029 A	18-01-2001 03-01-2001 27-02-2001
JP 02216309	A	29-08-1990	NONE	
US 4181189	A	01-01-1980	NONE	
EP 0262661	A	06-04-1988	JP 63090411 A DE 3766212 D1 EP 0262661 A2 KR 9107519 B1 US 4810004 A	21-04-1988 20-12-1990 06-04-1988 27-09-1991 07-03-1989
JP 02099415	A	11-04-1990	NONE	
JP 07186649	A	25-07-1995	DE 4408571 A1 GB 2277303 A , B US 5507510 A	29-09-1994 26-10-1994 16-04-1996
JP 58141907	A	23-08-1983	DE 3279084 D1 EP 0071250 A2 US 4537420 A	10-11-1988 09-02-1983 27-08-1985